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EXAMINER

VO, HAI

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/591,584
Filing Date: June 09, 2000
Appellant(s): DIETZ, PETER T

Robert L. Showalter
For Appellant

MAILED
JUN 17 2004
GROUP 1700

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04/19/2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

Appellant's brief includes a statement that there are no related appeals or interferences.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that rejected claims do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8). Claims 1-5, 9, 31-33, 38 and 39 stand together; claim 6 stands alone; claims 7, 13 and 17-21 stand together; claims 8-11 stand together; claim 10 stands alone; and claims 14 and 35 stand together; and claims 15 and 22 stand together.

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

6,013,722	YANG et al	01-2000
5,677,050	BILKADI et al	10-1997
5,118,540	HUTCHISON	06-1992
4,157,417	MURPHY	06-1979

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39 are rejected under 35

U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417).

Hutchison discloses a reflective film mounted on a substrate having a layer construction as follows, a protective fluorocarbon film, a first layer of pressure sensitive adhesive, a silver layer, a biaxially oriented polyethylene terephthalate (PET), a second layer of pressure sensitive adhesive, a biaxially oriented PET, a third layer of pressure sensitive adhesive and a glass substrate (example 5 and figures 3 and 6). The biaxially oriented PET is about 38 microns thick (column 10, line 18) within the claimed range. The protective fluorocarbon film of Hutchison corresponds to the scratch resistant layer coating of the claimed invention. Hutchison discloses the protective fluorocarbon film serves to protect the laminate from damage through wear and tear (column 6, lines 45-48). Likewise, the protective film is scratch resistant. Hutchison discloses the reflective film having three PET layers (example 6). Hutchison is using the same acrylic pressure sensitive adhesive as Appellant (column 7, line 67), the modulus strength of the

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adhesive would be inherently present. Like material has like property. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. The combination of examples 5, 7 and 8 of Hutchison discloses the laminate having a thickness greater than 5 mils meeting the specific range required by the claims. Hutchison teaches a layer of silver having a thickness of 1 to 1.5 microns. It is believed that the presence of the thin silver layer in the laminate does not necessarily cause the laminate completely non-transmissive to visible light but rather to reduce the visible light transmittance of the laminate. Since the claims are unspecific about the percentage of visible light transmission, Hutchison still reads on the claimed visible light transmittance. Hutchison teaches the reflective film suitable for solar energy applications (abstract). Hutchison does not specifically disclose the reflective film attached to window glass. Murphy, however, teaches the reflective film having been attached to window glass to reduce heat, glare of solar radiation to reduce heat, glare of solar radiation (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the reflective film in combination with window glass motivated by the desire to reduce heat, glare of solar radiation.

Hutchison does not specifically disclose the reflective film being capable of passing one or more of the tests as recited in the claims. However, it appears that the reflective film of Hutchison as modified by Murphy is structurally the same, and made of

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the same materials as the presently claimed laminate. The reflective film meets all the structural limitations, having the thickness within the claimed range. The reflective film is attached to the window glass by the acrylic pressure sensitive adhesive as disclosed by the present invention. Each biaxially oriented polyester film layer as disclosed by Hutchison has a thickness within the claimed range. The polyester films are bonded to each other by the pressure sensitive adhesive layer. The reflective film is light transmittance. Therefore, it is the examiner's position that the reflective film would be substantially inherently capable of passing one or more of the tests as recited in the claims. This is also in light with *In re Spada*, 15 USPQ 2d 1655 (1990).

Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1, in view of Tanaka et al (US 6,033,785).

Neither Hutchison nor Murphy discloses that the window glass is tempered. Tanaka, however, teaches a glass pane comprising a glass plate and a multilayered film formed on the surface of the glass plate (column 2, lines 22-30). Tanaka also teaches that the glass plate is a tempered glass plate (column 5, lines 15-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the tempered glass window to which the reflective film is attached because glass is tempered for strength and safety.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1 above, in view of Bilkadi et al (US 5,677,050).

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Hutchison discloses a laminate 100 comprising a scratch-resistant fluorocarbon film 160 bonded to an acrylic pressure sensitive adhesive 150 (figure 1). Hutchison is silent as to the laminate comprising a scratch-resistant ceramer coating. Bilkadi teaches the retroreflective sheeting comprising a ceramer coating which exhibits high levels of impact resistance, stain resistance and hardness (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification. Bilkadi discloses that the ceramer coating works well on polyacrylics adhesive (column 4, lines 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the ceramer coating with the scratch-resistant fluorocarbon film of Hutchison motivated by the desire to obtain a coating that exhibits higher levels of impact resistance, stain resistance and hardness.

Claims 14, 15, 22 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (US 5,118,540) in view of Murphy (US 4,157,417) as applied to claim 1 above, further in view of Yang et al (US 6,013,722).

Hutchison does not specifically teach the presence of a crosslinker in the attachable pressure sensitive adhesive. Yang, however, teaches a low haze acrylic emulsion pressure sensitive adhesive for use in optical articles comprising a cross-linking agent (column 4, lines 1-5). Yang teaches an adhesive coated film having a percent haze less than 2 % (table 1) within the claimed range. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a cross-linking agent into the attachable pressure sensitive adhesive of the

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window film motivated by the desire to obtain a laminate that exhibits low haze when adhered to glass surface.

(11) Response to Argument

Examiner's comments on HUTCHISON AND MURPHY AND CLAIMS 1-5, 7-9, 11, 13, 17-21, 31-33, 38 and 39.

Appellant argues that there is no motivation or suggestion to combine the teachings of Hutchison and Murphy in the manner espoused in the final Office Action and the Advisory Action. The examiner disagrees. Hutchison teaches a reflective film for use in a solar energy concentrator. Murphy teaches a solar control film having a layer construction similar to the reflective film as disclosed in the Hutchison reference. Murphy also teaches the solar control film for application to window glass to reduce heat, glare of solar radiation. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the reflective film in combination with window glass motivated by the desire to reduce heat, glare of solar radiation. It is believed that the motivation to combine the two cited references is strong and sufficient. Appellant further argues that the reflective film of Hutchison is highly reflective to visible, ultraviolet, and/or near infrared light whereas the solar control film of Murphy functions to transmit visible light while reducing ultraviolet and near infrared light and glare. Since the two films have such diametrically opposed functions, one skilled on the art would not be motivated to combine their teachings as proposed in the Office Action. The arguments are not found persuasive for patentability. In the first place, it is believed that the presence of the thin silver layer in the Hutchison film does not

necessarily cause the film completely non-transmissive to visible light but rather to reduce the visible light transmittance of the film instead. Since the claims are unspecific about the percentage of visible light transmission, Hutchison's film appears to transmit visible light. Secondly, the films of the Hutchison and Murphy inventions are both reflective to ultraviolet and infrared light. Therefore, it is not understood that the two films have opposed functions as argued by Appellant. Again, the examiner maintains that the motivation to combine the two cited references is sufficient and proper. Accordingly, the art rejections are thus sustained.

Examiner's comments on CLAIMS 7, 14 and 17-21.

Appellant argues that Hutchison does not disclose, teach or suggest that the film is capable of passing one or more of the tests as recited in the claims. Appellant states that the use of any acrylic pressure sensitive adhesive to bond together film layers to form a laminate will not necessarily result in the laminate passing the tests. The examiner disagrees. The examiner never contends that the use of the same acrylic pressure sensitive adhesive to bond together film layers inherently results in the laminate passing the tests. On the contrary, the basis of the inherency flows from the following reasons. The reflective film of Hutchison as modified by Murphy is structurally the same, and made of the same materials as the presently claimed laminate. The reflective film meets all the structural limitations, having the thickness within the claimed range. The reflective film is attached to the window glass by the acrylic pressure sensitive adhesive as disclosed by the present invention. Each biaxially oriented polyester film layer as disclosed by Hutchison has a thickness within the claimed range.

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The polyester films are bonded to each other by the pressure sensitive adhesive layer. The reflective film is light transmissive. Therefore, it is the examiner's position that the reflective film would be substantially inherently capable of passing one or more of the tests as recited in the claims. This is also in light with *In re Spada*, 15 USPQ 2d 1655 (1990).

Examiner's comments on CLAIMS 8 and 11.

Appellant argues that Hutchison does not disclose, teach or suggest that the adhesive possesses a shear storage modulus within the claimed range. Nothing in the claims is specific about the composition of the adhesive to provide the structural distinction between the adhesive of presently claimed invention and the Hutchison reference. Hutchison is using the same acrylic pressure sensitive adhesive as Appellant (column 7, line 67), the modulus strength of the adhesive would be inherently present. Like material has like property. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990).

Examiner's comments on HUTCHISON, MURPHY AND BILKADI ET AL AND CLAIM 6.

Appellant argues that Bilkadi discloses a retroreflective sheeting including a cured creamer layer, however, there is no teaching or suggestion in the Bilkadi reference of a laminate comprising at least two flexible nonadhesive polymeric material laminae and wherein the laminae has a thickness of at least about 5 mils, exhibits a light transmittance and is attached to window glass. There is no need for Bilkadi to address these issues since they are already taught in the Hutchison reference. Further,

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Appellant argues that there is no motivation or suggestion for combining the teachings of Hutchison, Murphy and Bilkadi. The examiner disagrees. Hutchison discloses a laminate 100 comprising a scratch-resistant fluorocarbon film 160 bonded to an acrylic pressure sensitive adhesive 150 (figure 1). Hutchison is silent as to a scratch-resistant ceramer coating. Bilkadi teaches the retroreflective sheeting comprising a ceramer coating which exhibits high levels of impact resistance, stain resistance and hardness (abstract). This is important to the expectation of successfully practicing the invention of Hutchison and thus suggesting the modification. Bilkadi discloses that the ceramer coating works well on polyacrylics adhesive (column 4, lines 12-13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the ceramer coating with the scratch-resistant fluorocarbon film of Hutchison motivated by the desire to obtain a coating that exhibits higher levels of impact resistance, stain resistance and hardness.

Examiner's comments on HUTCHISON, MURPHY AND TANAKA ET AL.

AND CLAIM 10.

Appellant argues that Tanaka does not rectify the missing feature tempered glass of the combination of Hutchison and Murphy. The examiner again disagrees. Neither Hutchison nor Murphy discloses that the window glass is tempered. Tanaka, however, teaches a glass pane comprising a glass plate and a multilayered film formed on the surface of the glass plate (column 2, lines 22-30). Tanaka also teaches that the glass plate is a tempered glass plate (column 5, lines 15-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

employ the tempered glass window to which the reflective film is attached because glass is tempered for strength and safety.

Examiner's comments on HUTCHISON, MURPHY AND YANG ET AL. AND CLAIMS 14, 15, 22 and 35.

Appellant argues that Yang does not provide any motivation for combining the teaching of Hutchison and Murphy. The arguments are not found persuasive. Hutchison does not specifically teach the presence of a crosslinker in the attachable pressure sensitive adhesive. Yang, however, teaches a low haze acrylic emulsion pressure sensitive adhesive for use in optical articles comprising a cross-linking agent (column 4, lines 1-5). Yang teaches an adhesive coated film having a percent haze less than 2 % (table 1) within the claimed range. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a cross-linking agent into the attachable pressure sensitive adhesive of the window film motivated by the desire to obtain a laminate that exhibits low haze when adhered to glass surface.

Appellant argues that Yang does not disclose a laminate comprising a first polymeric material lamina bonded to at least one additional polymeric material lamina wherein the laminate and a window glass have a percent haze less than or equal to about 2%. As a secondary reference, Yang does not need to disclose the laminate comprising a first lamina and second lamina as presently claimed since these features are already taught in the Hutchison reference. Additionally, Yang does teach the adhesive coated film

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having a percent haze less than 2 % (table 1). This is a motivation to combine the Yang invention with Hutchison and Murphy inventions.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

HV

June 14, 2004

Conferees

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